

Title (en)

ASSESSING MACHINE TRAJECTORIES FOR COLLISION AVOIDANCE

Title (de)

BEURTEILUNG VON MASCHINENWEGEN ZUR KOLLISIONSVERMEIDUNG

Title (fr)

ÉVALUATION DE TRAJECTOIRES DE MACHINE POUR UN ÉVITEMENT DE COLLISION

Publication

**EP 3028102 B1 20230906 (EN)**

Application

**EP 14831436 A 20140731**

Priority

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- US 2014049097 W 20140731

Abstract (en)

[origin: WO2015017639A1] Disclosed are various embodiments for assessing machine trajectories for collision avoidance. A three-dimensional model of a patient based at least in part on data received from a three-dimensional imaging device is generated. The three-dimensional model of the patient is aligned with a coordinate system of a three-dimensional model of a radiation treatment machine. It is then determined whether a collision between the patient and the radiation treatment machine will occur at each one of a series of control points of the radiation treatment plan.

IPC 8 full level

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CPC (source: EP US)

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**G05B 2219/49137** (2013.01 - EP US)

Citation (examination)

- WO 2012137116 A1 20121011 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- THOMAS JUND ET AL: "Particle-based forecast mechanism for continuous collision detection in deformable environments", 20091005; 1077952576 - 1077952576, 5 October 2009 (2009-10-05), pages 147 - 158, XP058313901, ISBN: 978-1-60558-711-0, DOI: 10.1145/1629255.1629274

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